Environmental Resources Management, Inc.

855 Springdale Drive • Exton, Pennsylvania 19341 • (215) 524-3500 • Telex 4900009249

134472

1 August 1988

Mr. Jack Kelly
U.S. EPA
CERCLA Remedial Enforcement Section
Region III
841 Chestnut Street
Philadelphia, PA 19107

File No. 11014

RE: First Quarter Residential Ground Water Sampling Results
William Dick Lagoons Site

Dear Mr. Kelly:

In accordance with the approved Work Plan for Residential Sampling, Water Supply Improvements and Restriction of Access at the William Dick Lagoons Site dated 22 December 1987, 18 residential water supplies were sampled during the first quarter 1988. This sampling was conducted between 28 March and 1 April, 1988.

Six first time water quality results are also included for residents who requested sampling during the first quarter period.

WATER QUALITY RESULTS

The water quality results of the first quarter 1988 are presented on Table 1. The compounds reported on Table 1 are known to be present as a result of a detailed QA/QC review (report is attached). A current historical compilation of residential sampling results is presented in Table 2.

Six residential raw water supplies detected TCE in excess of 5 ppb and 11 supplies detected between the detection limit of 0.2 ppb and 5 ppb. Two of the supplies reporting TCE at greater than 5 ppb have granular activated carbon treatment systems and both samples of the post treatment water reported less than 5 ppb.

MODIFICATIONS TO EXISTING PROGRAM

As provided in the Work Plan, and the Consent Agreement and Order (27 January 1988), this sampling and analysis has been performed to detect the migration of site related compounds as well as to assess the need for water supply treatment and frequency of monitoring at each of the residences. Where quarterly monitoring results indicate a change in ground water quality, the assignment of residences to one of the three tier groups is changed.

AR401509

Reassignments to Tier III

As a result of the first round of quarterly sampling, four residences were reassigned to Tier III status. This was based on the detection of trichloroethene (TCE) in excess of the Maximum Contaminant Level (MCL) of 5 ppb. These include:

06 - Ostrosky - Granulated Activated Carbon-GAC installed

08 - Alexander - GAC installed

32 - J. Gregor - Refused system and subsequent sampling

48 - Baldwin Campground spring - installation in progress.

As indicated above, GAC treatment systems have been installed at two of the residences, however, installation of a system at the J. Gregor residence has not been arranged due to homeowner resistance.

The Baldwin Spring has recently been discovered to serve a tenant house with drinking water, as well as the majority of the campground. Arrangements are currently being made for the installation of the appropriate treatment components.

Each of these four residences is being included in the Tier III monitoring group and will be sampled quarterly, with sample analysis by EPA Method 601, and annually for the Target Compound List. We will continue to attempt to sample the J. Gregor residence.

Assignment to Tier II

The A. Walton residence was sampled for the first time on 28 March 1988. The results of this initial sampling of this residence for TCE were below the MCL, but above the limit of detection. This residence is served by one of the two wells supplying the High Point Trailer Park. The A. Walton residence is being incorporated as a Tier II residence in accordance with the Work Plan.

OTHER ACTIONS

Following a site visit with Mr. Alfred Baldwin on 23 June 1988, Chemical Leaman is attempting to obtain water supply distribution information for the Highpoint Trailer Park, the Hidden Acres Campground (Baldwin), and the Spring Hills Trailer Park. This information will enable us to determine the difference in water quality between the two wells serving the Highpoint Trailer Park.

The second sampling event of the quarterly monitoring program was performed on the week of 20 June; subsequent sampling events are tentatively scheduled for the weeks of 12 September and 12 December 1988.

If you have any questions regarding this submittal, or the quarterly monitoring program, please call.

Sincerely

David P. Steele
Project Coordinator

Ronald A. Landon, P.G.
Principal-in-Charge

DPS/trb
cc: Richard C. Littlepage, CLTL
Susan Gilliland, ERM

TABLE 1. FIRST QUARTER RESIDENTIAL WATER QUALITY RESULTS
WILLIAM DICK LAGOONS SITE

DATE ISSUED: 6/6/88

HOUSE #	RESIDENCE	LOCATION [1]	DATE	SAMPLER [1]	SAMPLE LIST	Concentrations in ug/L (ppb) trichloro ethene	methylene chloride	chloroform	1,2-dichloro ethane	1,1,1 trichloro ethane	1,1-dichloro ethene	tr-1,2-di chloroethene	1,2-dichloro propane	1,4-dichloro benzene
5	L KOONTZ	KT	3/28/88	ERM	601	0.55	8.0 B	0.98 B	1.5 B	0.41				
6	OSTROSKY	PT	3/28/88	ERM	601	6.0	7.5 B	1.2 B	1.7 B	1.2				
7	WHITEMAN	PT	3/29/88	ERM	601	4.7	3.6 B	0.75 B						1.1
8	ALEXANDER	PT/TH	4/1/88	ERM	601	6.6	5.5 B	0.87 B	0.56 B		1.5			
11	WARREN	PT	3/28/88	ERM	601	2.7	3.3 B	0.39 B						
18	GUE	KT	3/28/88	ERM	601	4.2	9.5 B	0.92 B	0.55 B					
29	WEARSHING	RAW	3/28/88	ERM	601		11 B	1.2 B	0.49 B	0.32			0.24 B	
29		MID	3/28/88	ERM	601		5.0 B	0.55 B			4.0			
29		POST	3/28/88	ERM	601		5.2 B	0.52 B						
30	CALVERT	PT	3/29/88	ERM	601		3.4 B	0.35 B	0.36 B					
32	J GREGOR	KT	3/28/88	ERM	601	18	5.7 B	1.4 B	0.68 B		1.8 S	0.70 B	0.28 B	
34	ROLLINSON	OT	3/28/88	ERM	601	1.1	6.0 B	0.69 B	0.44 B					
37	SARNAK	RAW	3/28/88	ERM	601	0.68 S	6.1 B	0.67 B	1.1 B				0.26 B	0.40
37		MID	3/28/88	ERM	601		3.1 B	0.27 B	0.43 B				0.28 B	0.39
37		POST	3/28/88	ERM	601		4.8 B	0.56 B	0.52 B		1.6		0.25 B	0.43
41	HIMELRIGHT	PT/SOFT	3/28/88	ERM	601	0.58	10 B	1.1 B	1.7 B					
42	L GREGOR	RAW	3/28/88	ERM	601	20	30 B	4.3 B	2.8 B					
42		MID	3/28/88	ERM	601	0.88	4.4 B	0.58 B	0.42 B					
42		POST	3/28/88	ERM	601	0.28	5.3 B	0.52 B						
44	GREGOR/COMBS	PT/TH	3/29/88	ERM	601	2.0	9.5 B	1.7 B	0.72 B				0.29 B	
48	BALDWIN SPRING	OT	3/29/88	ERM	601	6.9	6.6 B	1.1 B	0.41 B			0.30 B	0.26 B	
52	HART	RAW	3/29/88	ERM	601	7.1	3.6 B	0.47 B	0.30 B					
52		MID	3/29/88	ERM	601	0.21	7.4 B	0.79 B	0.56 B					
52		POST	3/29/88	ERM	601		6.5 B	0.93 B	0.71 B				0.28 B	
53	GARLAN SMITH	PT/TH	3/28/88	ERM	601	0.61	6.9 B	0.82 B	0.97 B				0.36 B	
70	CAWLEY		1/18/88	ERM	601		3.9 B	0.39 B						
71	MORROW	PT	2/19/88	ERM	601		4.6 B	0.36 B						
72	BICKINGS	PT	2/19/88	ERM	601		5.3 B	2.0 S						
73	CALLUM	OT	3/1/88	ERM	601		5.2 B	0.57 B	0.85					
74	R WALTON	OT	3/1/88	ERM	601		5.2 B	0.47 B	0.77	1.2				
76	FRITZ	OT	3/8/88	ERM	601									
78	A WALTON	OT	3/28/88	ERM	601	2.6	6.4 B	0.76 B	0.44 B					0.77

NOTES:

[1] KT kitchen tap
OT outside tap
RAW tap before carbon filter
MID tap between carbon filters
POST sample tap after carbon filters
PT pressure tank tap
PT/TH pressure tank with teflon hose
PT/SOFT pressure tank tap, after softener line

S result is a suspect value

B result is qualitatively questionable due to the presence of the compound in a blank at similar concentrations

ERM Sampling and analysis by ERM and subcontracted laboratory

TABLE 2. HISTORICAL RESIDENTIAL ORGANICS WATER QUALITY RESULTS - WILLIAM DICK LAGOONS SITE

DATE ISSUED: 6/6/88

Concentrations in ug/L (ppb)

HOUSE # [1]	RESIDENCE	LOCATION [2]	DATE	SAMPLER [3]	SAMPLE LIST [4]	trichloro ethene	chloro methane	chloroform	1,1-dichloro ethane	bromodichloro methane	1,1 dichloro ethene	1,2 dichloro ethane	1,1,1 trichloro ethane	1,2 dichloro ethene	tetrachloro ethene	toluene	1,4-dichloro benzene	di-n-butyl phthalate	bis(2)ethylhexyl phthalate	di-n-octyl phthalate
1	GABEL	KT	5/21/87	EPA	624															
2	SHANK	KT	5/21/87	EPA	624															
3	GUE	KT	5/21/87	EPA	624	140	5J	4J						2J						
4	SHANNON	KT	5/21/87	EPA	624/608															
5	L.NOORTZ		5/21/87	EPA	624	3J														
5		KT	9/9/87	ERM	TCL	2.6														
5		KT	3/28/88	ERM	601	0.55							0.41							
6	OSTRODKY		5/21/87	EPA	624/608	2J														
6		PGT	9/9/87	ERM	TCL	1													5.6J	
6		PT	3/28/88	ERM	601	6							1.2							
7	WHITEMAN		5/21/87	EPA	624	2J														
7			9/10/87	EPA	TCL	3J														
7		KT	9/10/87	ERM	TCL	3.2														
7		PT	3/29/88	ERM	601	4.7											1.1			
8	ALEXANDER		5/21/87	EPA	624	3J														
8		T	9/9/87	ERM	TCL															
8		PT/TH	4/1/88	ERM	601	0.6			1.5											
9	L.GREGOR	KT	5/21/87	EPA	624	200		6						3J						
9			7/23/87	ERM	TCL(624)	120														
10	LEASE		4/11/85	EPA	PP															
10		KT	5/21/87	EPA	624															
11	WARREN		5/21/87	EPA	624	8J														
11		KT	9/9/87	ERM	TCL	1.9														
11		PT	3/28/88	ERM	601	2.7														
12	SCHAFFER	KT	5/21/87	EPA	624/608															
13	RAMSTEIN	KT	5/21/87	EPA	624															
14	GLORIA SMITH	KT	5/21/87	EPA	624															
15	WEST	KT	5/21/87	EPA	624															
16	BARRADE		7/23/87	ERM	624	130														
17	GREGOR/COMBS		7/23/87	ERM	624	120														
18	SCHEBE	OT	9/9/87	ERM	601/602															
19	GUE		9/9/87	ERM	601/608	0.94		1		0.66										
19		KT	3/28/88	ERM	601	4.2														
20	MEES		5/21/87	EPA	624/608															
20		KT	9/9/87	ERM	TCL													3.6J		
21	THOMPSON	KT	5/21/87	EPA	624															
21		KT	11/16/87	ERM	601															
22	TIMMONS		4/11/85	EPA	PP															
22			5/21/87	EPA	624															
22			11/4/87	ERM	601/602															
23	BEDRICK	KT	5/21/87	EPA	624/608															
23			11/2/87	ERM	601/602															
24	MONACHELLO	OT	5/21/87	EPA	624															
25	WILLIS	OT	5/21/87	EPA	624/608															
26	HARTWYCK	OT	5/21/87	EPA	624															
27	GERBER	OT	5/21/87	EPA	624/608															
28	GUSSON	KT	5/21/87	EPA	624															
29	WEARSHING		9/9/87	ERM	601/602	11		0.41												
29		MID	11/9/87	ERM	601															
29		POST	11/9/87	ERM	601															
29		RAW	3/28/88	ERM	601								0.32							
29		MID	3/28/88	ERM	601				4											
29		POST	3/28/88	ERM	601															

NOTES:

[1]
- 3 Spring location
- 1 Well location

[2]
- KT kitchen tap
- SH spring house
- PT pressure tank tap
- PGT, RAW tap before carbon filter
- MID tap betwn. carbon filters
- POST sample tap after carbon filters
- OT outside tap
- WB bailed from well
- PT/TH pressure tank with triton hose
- PT/BOFT pressure tank after softener

[3]
- EPA Sampling/analysis by EPA contractor
- ERM Sampling and analysis by ERM and subcontracted laboratory

[4]
- TCL Target Compound List- in ERM analyses, VOA by 601/602 unless otherwise noted
- PP Priority Pollutant List
- VOC volatile organic compounds

- J result is a quantitative estimate
- B result is a suspect value
- 601 624 / 601/602 EPA analytical methods for VOA
- 608 EPA analytical method for pesticides

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30	CALVERT	OT	9/10/87	ERM	601/602	3.2														
30		PT	3/29/88	ERM	601															
31	HOFFMAN	OT	9/9/87	ERM	601/602	1.9		0.33												
32	J.GREGOR		4/11/85	EPA	PP	5.5														
32		KT	9/9/87	ERM	601/602	0.27														
32			9/9/87	EPA	TCL	9														
32		KT	3/28/88	ERM	601	10			1.8 B											
33	E. JELKE	KT	9/9/87	ERM	601/602															
34	ROLLINSON	OT	9/10/87	ERM	TCL	0.34														
34		OT	9/10/87	EPA	TCL															
34		OT	3/28/88	ERM	601	1.1														
35	WALPOLE		10/29/87	ERM	601/602			0.25												
36	C. JELKE		9/9/87	ERM	601/602															
37	SARNAK	KT	9/10/87	ERM	601/602	5.2		0.81												
37		MID	11/16/87	ERM	601			0.62				0.3								
37		POST	11/16/87	ERM	601															
37		RAW	3/28/88	ERM	601	0.66 B											0.4			
37		MID	3/28/88	ERM	601												0.39			
37		POST	3/28/88	ERM	601				1.6								0.43			
38	HERMANNWALTER		9/9/87	ERM	601/602															
39	J. JELKE		9/10/87	ERM	601/602			0.2												
40	FOULKE	KT	9/10/87	ERM	601/602								0.72							
41	HIMELRIGHT	KT	9/9/87	ERM	601/602	2		0.26												
41		PT/SOFT	3/28/88	ERM	601	0.58														
42	L.GREGOR		7/1/87	ERM		120		3.3J						2.5J						
42			9/10/87	ERM	TCL	180		4.7												
42			9/10/87	EPA	TCL	170														
42		MID	1/25/88	ERM	601	0.25														
42		POST	1/25/88	ERM	601															
42		RAW	3/28/88	ERM	601	20														
42		MID	3/28/88	ERM	601	0.88														
42		POST	3/28/88	ERM	601	0.28														
43	BARRAGE		7/1/87	ERM		120		3.4J						2.4J						
43		W-S	9/4/87	ERM	601/602	0.49														
44	GREGORCOMBS		7/1/87	ERM		120		3.4J						2.3J						
44		W-S	9/4/87	ERM	601/602	0.46		0.23												
44		PT/TH	3/29/88	ERM	601	2														
45	STABNY	well not installed																		
46	HERR		10/19/87	ERM	601/602						0.53		3.4							
47	BALDWIN CO.		9/9/87	ERM	TCL													2.6J	63J	3.4J
47			9/9/87	EPA	TCL															
48	BALDWIN CO. SP.		9/9/87	ERM	TCL	3.1J														
48			9/9/87	EPA	TCL	3J														
48		OT	3/29/88	ERM	601	6.9														
49	KING		9/9/87	ERM	601/602															
50	KING		9/9/87	ERM	TCL													2.8J		
50			9/9/87	EPA	TCL															
51	ABANDONED		9/9/87	ERM	TCL															
51			9/9/87	EPA	TCL															
52	HART	OT	9/10/87	ERM	601/602	6.2J		0.33J							2.8(DUP)					
52		OT	9/10/87	EPA	TCL	5														
52		MID	11/16/87	ERM	601															
52		POST	11/16/87	ERM	601															
52		POST	1/18/88	ERM	601	past building														
52		RAW	2/1/88	ERM	TCL	5.9														
52		POST	2/11/88	ERM	601															
52		RAW	3/29/88	ERM	601	7.1														
52		MID	3/29/88	ERM	601	0.21														
52		POST	3/29/88	ERM	601															

NOTES:

[1]
3 Spring location
1 Well location

[2]
KT kitchen tap
SH spring house
PT pressure tank tap
PRE tap before carbon filter
MID tap btwn. carbon filters
POST sample tap after carbon filters
OT outside tap
WB bailed from well
PT/TH pressure tank with teflon hose
PT/SOFT pressure tank after softener

[3]
EPA Sampling/analysis by EPA contractor
ERM Sampling and analysis by ERM and subcontracted laboratory

[4]
TCL Target Compound List in ERM analyses, VOA by 601/602 unless otherwise noted
PP Priority Pollutant List
VOC volatile organic compounds

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DATE ISSUED: 6/6/88

Concentrations in ug/l (ppb)

HOUSE # [1]	RESIDENCE	LOCATION [2]	DATE	SAMPLER [3]	SAMPLE LIST [4]	trichloro ethene	chloro methane	chloroform	1,1-dichloro ethane	bromodichloro methane	1,1 dichloro ethane	1,2 dichloro ethane	1,1,1 trichloro ethane	1,2 dichloro ethane	tetrachloro ethene	toluene	1,4-dichloro benzene	di-n-butyl phthalate	bis(2)ethylhexyl phthalate	di-n-octyl phthalate
53	GARLAN SMITH	KT	9/10/87	ERM	601/602	0.22														
53		PT/TH	3/28/88	ERM	601	0.61														
54	MACINTYRE/BRAGG		9/9/87	ERM	601/602															
54			10/13/87	ERM	601/602															
55	RENNIE	SH	9/9/87	ERM	601/602															
56	HELLER	KT	11/16/87	ERM	601															
57	DETWILER	OT	11/16/87	ERM	601															
58	KUZNIERCZYK		4/11/85	EPA	PP											2.2J				
58		PT	11/16/87	ERM	601															
59	RUTHERFORD	KT	11/16/87	ERM	601															
60	HANSON	KT	11/16/87	ERM	601															
61	THORNTON	PT	11/16/87	ERM	601															
62	MILLER	KT	12/7/87	ERM	601															
63	WISE	KT	12/7/87	ERM	601										0.31					
64	KERR	KT	12/7/87	ERM	601															
65	P. KOONTZ	KT	12/7/87	ERM	601															
66	ELLSWORTH	OT	12/7/87	ERM	601															
67	GRIFFITH	KT	12/7/87	ERM	601															
68	WEAVER	PT	12/7/87	ERM	601															
69	RIGGINS	KT	1/4/88	ERM	601							0.74								
70	CAWLEY		1/19/88	ERM	601															
71	MORROW	PT	2/19/88	ERM	601															
72	SICKINGS	PT	2/19/88	ERM	601			2.8												
73	CALLUM	OT	3/1/88	ERM	601							0.85								
74	WALTON	OT	3/1/88	ERM	601							0.77	1.2							
75	WYATT		10/7/87	ERM	601/602															
76	FRITZ	OT	3/8/88	ERM	601															
77	NEFF		9/9/87	EPA	TCL															
78	A. WALTON	OT	3/28/88	ERM	601	2.8											0.77			

NOTES:

[1]
- 3 Spring location
- 1 Well location

[2]
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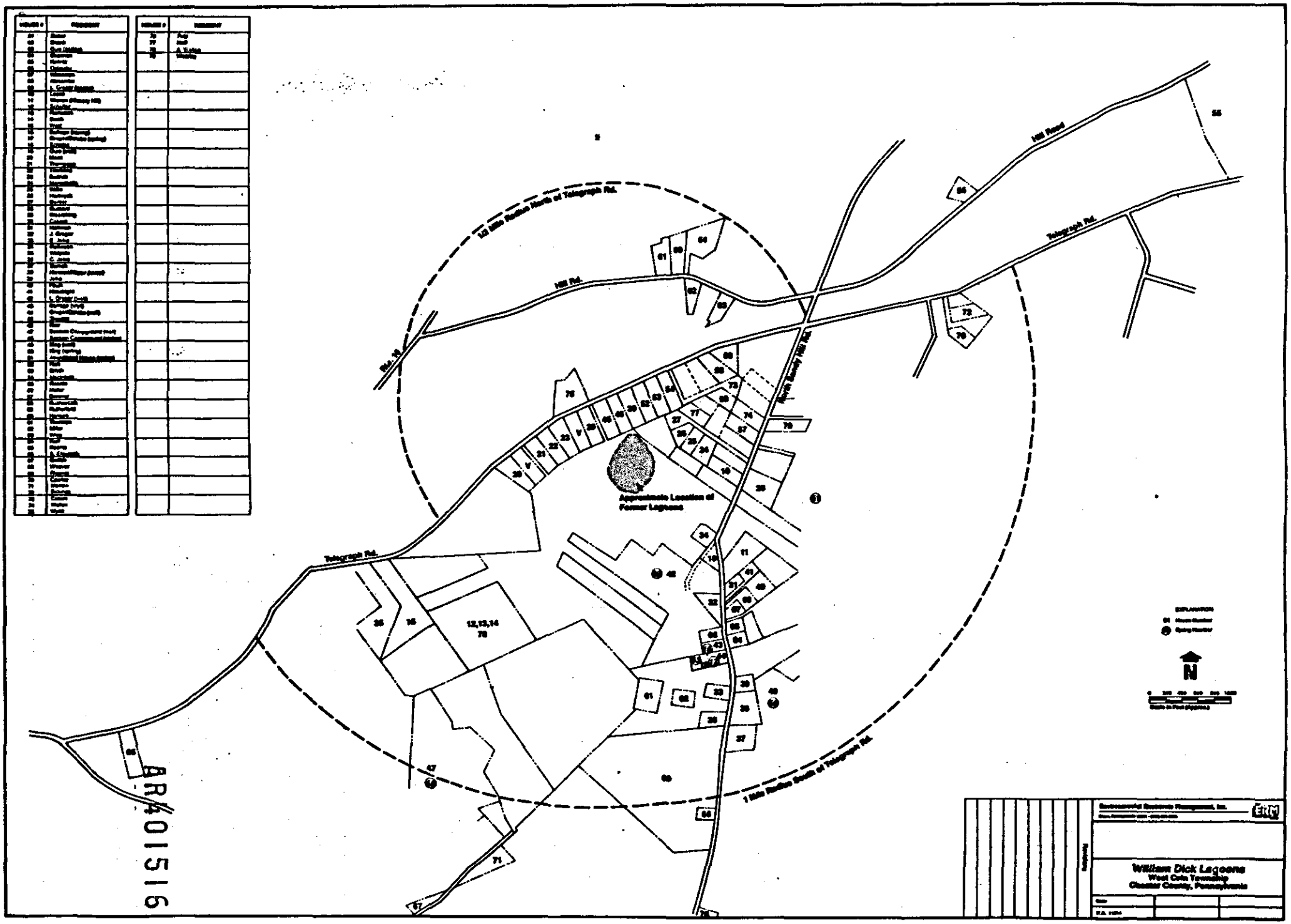
AR4 5


Hill Road
Telegraph Rd.
Hill Rd.
North Bailey Hill Rd.
Approximate Location of Former Lagoons
12,13,14
70
1 Mile Radius South of Telegraph Rd.
1/2 Mile Radius North of Telegraph Rd.
N
William Dick Lagoons
West Caln Township
Chester County, Pennsylvania
ERM

Analytical Quality Assurance Review
William Dick Lagoon Site
Residential Sampling Program
First Quarter 1988

14 June 1988

Prepared for :
Chemical Leaman Tank Lines, Inc.
102 Pickering Way
Lionville, Pennsylvania 19341-0200

Prepared by:
Environmental Resources Management, Inc.
855 Springdale Drive
Exton, Pennsylvania 19341

File: 110-14-00-01

The ERM Group

Chemical Leaman Tank Lines, Inc
William Dick Lagoons Site
Residential Sampling Program
First Quarter 1988
Analytical Quality Assurance Review

This analytical quality assurance review is based on the review of data for twenty-six residential ground water samples, two blind blanks, laboratory method blanks and associated quality control samples collected on 28, 29 March and 1 April 1988 in association with the William Dick Lagoons Site Residential Sampling Program. The samples that have been reviewed are listed on Attachment 1. The review was performed according to the Functional Guidelines for Evaluating Organic Analyses (USEPA). Data summary tables for each sample are attached to this review.

1.0 Organic Data

1.1 Introduction

The purgeable halocarbon, volatile organic analyses of the twenty six residential ground water samples were performed by CompuChem Laboratories of Research Triangle Park, North Carolina using EPA Method 601. The findings in this report are based on a review of the following data deliverables: holding times, method and blind travel blank results, surrogate compound recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, duplicate analysis results, calibration data, target compound matching quality and quantitation of results.

The analyses were performed acceptably, but necessitate a few qualifying statements. It is recommended that the reported results be used with the following qualifier statements.

1.2 Qualifiers

The presence of methylene chloride in all samples is qualitatively questionable because of the presence of this compound in travel and/or laboratory method blanks at similar concentrations. EPA protocol allows positive sample results that are less than or equal to ten (10) times travel or method blank contamination levels of common laboratory contaminants such as methylene chloride to be considered qualitatively questionable. This has been indicated with a "B" next to the reported results.

The presence of chloroform, 1,2-dichloroethane, 1,2-dichloropropane, and trans-1,2-dichloroethene in the samples

listed below is qualitatively questionable because of the presence of these compounds in travel and/or laboratory method blanks. EPA protocol allows positive sample results that are less than or equal to five (5) times travel or method blank contamination levels to be considered qualitatively questionable. This has been indicated with a "B" next to the reported results.

Compound	Samples with Questionable Results
chloroform	All samples with positive results
1,2-dichloroethane	All samples with positive results
1,2-dichloropropane	All samples with positive results
trans-1,2 dichloroethene	48 Baldwin Springs and 32 Gregor raw

The Gregor Raw sample was analyzed as quality control, matrix spike duplicate samples. Therefore, duplicate analyses were obtained for compounds which were not spiked. The unspiked, MS and MSD analyses for trichloroethene yielded results of 18 ug/1, 14 ug/1 and 14 ug/1, respectively, yielding a relative standard deviation (RSD) of 15%. This low RSD indicates good laboratory precision for trichloroethene in this sample. However, 1, 1-dichloroethene was detected at erratic concentrations of 1.8 ug/1 (unspiked),0.80 ug/1 (MS) and <0.30 ug/1 (MSD). The 1, 1-dichloroethene result reported for the Gregor Raw sample has been labeled as suspect because of the erratic triplicate results. This has been indicated with an "S" next to the result on the summary report.

The analysis of the Sarnak Raw sample detected trichloroethene at 0.68 ug/1. This result has been labelled suspect by ERM because a blind duplicate of this location submitted for quality control purposes did not detect trichloroethene above the detection limit of 0.20 ug/1. This has been indicated with an "S" next to the report result on the summary report.

2.0 Summary

The organic analyses for these samples were performed accceptably but necessitated a few qualifying statements. This analytical quality assurance review has identified the aspects of the analytical data which have required qualifying statments. A support documentation package has been prepared for this quality assurance review and is filed with the CLTL-William Dick Lagoon Site project file.

Report Prepared By:

Lester J. Dupes
Quality Assurance Chemist

10 June 1988
Date

Approved By:

David R. Blye
David R. Blye
Quality Assurance Manager

10 June 1988
Date

AR401520

The ERM Group

ATTACHMENT #1

ERM TR#	Resident	CompuChem #
7288	8 Alexander	188883
7219	44 Gregor/Combs	188304
7220	52 Hart-Post	188305
7235	52 Hart-Mid	188306
7236	52 Hart-Raw	188308
7238	11 Warren	188309
7239	7 Whiteman	188310
7213	37 Sarnak-Post	187961
7214	37 Sarnak-Mid	187962
7215	37 Sarnak-Raw	187963
7216	111 Kanras-Raw	187964-Blind dup. of 7215
7217	32 Gregor Raw(MS/MSD)	187965
7218	109 Watkins-Blind Blank	187966
7221	42 Gregor-Post	187967
7222	42 Gregor-Mid	187968
7223	42 Gregor-Raw	187971
7224	6 Ostrosky	187972
7225	5 Koontz	187973
7226	78 A. Walton	187974
7227	19 Guie	187975
7228	41 Himelright	187976
7229	34 Rollinson	187977
7230	53 Smith	187978
7231	29 Wearshing-Post	187980
7232	29 Wearshing-Mid	187982
7233	29 Wearshing-Raw	187985
7234	Equipment Rinse #1	187987
7240	30 Calvert	188311
7241	116 Klose-Blind Blank	188314
7242	Equipment Rinse #2	188315

The ERM Group

Attachment 1 (4 pages)

ARD 1522

HISTORICAL RESIDENTIAL WATER QUALITY - ORGANICS WILLIAM DICK LAGOONS SITE

DATE ISSUED: 4/20/88

Concentrations in ug/L (ppb)

HOUSE # [1]	RESIDENCE	LOCATION [2]	DATE	SAMPLER [3]	SAMPLE LIST [4]	trichloro ethane	chloro methane	chloroform	bromodichloro methane	1,1 dichloro ethane	1,2 dichloro ethane	1,1,1 trichloro ethane	tr 1,2 dichloro ethene	tetrachloro ethene	toluene	di-n-butyl phthalate	bis(2)ethylhexyl phthalate	di-n-octyl phthalate
1		KT	5/21/87	EPA	624													
2		KT	5/21/87	EPA	624													
3		KT	5/21/87	EPA	624	140	8J	9J					8J					
4		KT	5/21/87	EPA	624/608													
5			5/21/87	EPA	624	8J												
5		KT	9/9/87	ERM	TCL	2.9												
6			5/21/87	EPA	624/608	2J												
6		PCT	9/9/87	ERM	TCL	1											9.9J	
7			5/21/87	EPA	624	2J												
7			8/10/87	EPA	TCL	3J												
7		KT	9/10/87	ERM	TCL	3.2												
8			5/21/87	EPA	624	2J												
8		T	9/9/87	ERM	TCL													
9		KT	5/21/87	EPA	624	200		8					9J					
9			7/23/87	ERM	TCL(624)	129												
10			4/11/88	EPA	PP													
10		KT	5/21/87	EPA	624													
11			5/21/87	EPA	624	8J												
11		KT	9/9/87	ERM	TCL	1.9												
12		KT	5/21/87	EPA	624/608													
13		KT	5/21/87	EPA	624													
14		KT	5/21/87	EPA	624													
15		KT	5/21/87	EPA	624													
16			7/23/87	ERM	624	190												
17			7/23/87	ERM	624	129												
18		CT	8/9/87	ERM	601/602													
19			9/9/87	ERM	601/602	9.04		1	0.59									
20			5/21/87	EPA	624/608													
20		KT	9/9/87	ERM	TCL											9.9J		
21		KT	5/21/87	EPA	624													
21		KT	11/10/87	ERM	601													
22			4/11/88	EPA	PP													
22			5/21/87	EPA	624													
22			11/4/87	ERM	601/602													
23		KT	5/21/87	EPA	624/608													
23			11/2/87	ERM	601/602													
24		CT	5/21/87	EPA	624													
25		CT	5/21/87	EPA	624/608													
26		CT	5/21/87	EPA	624													
27		CT	5/21/87	EPA	624/608													
28		KT	5/21/87	EPA	624													
29			8/9/87	ERM	601/602	11		0.41										
29		MID	11/9/87	ERM	601													
29		POST	11/9/87	ERM	601													

NOTES:

[1] 3 Spring location; 1 Well location

[2] KT kitchen tap; SH spring house; PT pressure tank tap; PCT, RAW tap before carbon filter; MID tap between carbon filters; POST sample tap after carbon filters; CT outside tap; WB bailed from well

[3] EPA Sampling/analysis by EPA contractor; ERM Sampling and analysis by ERM and subcontracted laboratory

[4] TCL Target Compound List- in ERM analyses, VOA by 601/602 unless otherwise noted; PP Priority Pollutant List; VOC volatile organic compounds

J result is a quantitative estimate; R result is a suspect value; 601 624 / 601/602 EPA analytical methods for VOA; 608 EPA analytical method for pesticides

HISTORICAL RESIDENTIAL WATER QUALITY - ORGANICS

DATE ISSUED: 4/20/88

Concentrations in ug/L (ppb)

HOUSE # [1]	RESIDENCE	LOCATION [2]	DATE	SAMPLER [3]	SAMPLE LIST [4]	trichloro ethene	chloro methane	chloroform	bromodichloro methane	1,1 dichloro ethane	1,2 dichloro ethane	1,1,1 trichloro ethane	1,2 dichloro ethene	tetrachloro ethene	toluene	di-n-butyl phthalate	bis(2)ethylhexyl phthalate	di-n-octyl phthalate
30		OT	9/10/87	ERM	601/602	5.2												
31		OT	9/9/87	ERM	601/602	1.9		0.82										
32			4/11/88	EPA	PP	5.6												
32		KT	9/9/87	ERM	601/602	0.27												
32			9/9/87	EPA	TCL	0												
33		KT	9/9/87	ERM	601/602													
34		OT	9/10/87	ERM	TCL	0.54												
34		OT	9/10/87	EPA	TCL													
35			10/20/87	ERM	601/602			0.25										
35			9/9/87	ERM	601/602													
37		KT	9/10/87	ERM	601/602	5.2		0.51										
37		MID	11/16/87	ERM	601			0.62			0.9							
37		POST	11/16/87	ERM	601													
39			9/9/87	ERM	601/602	BDL												
39			9/10/87	ERM	601/602	BDL		0.2										
40		KT	9/10/87	ERM	601/602	BDL						0.72						
41		KT	9/9/87	ERM	601/602	2		0.25										
42			7/1/87	ERM		120		3.3J					2.5J					
42			9/10/87	ERM	TCL	150		4.7										
42			9/10/87	EPA	TCL	170												
42		MID	1/28/88	ERM	601	0.25												
42		POST	1/28/88	ERM	601													
43			7/1/87	ERM		120		3.4J					2.4J					
43		W-8	9/9/87	ERM	601/602	0.49												
44			7/1/87	ERM		120		3.4J					2.3J					
44		W-8	9/9/87	ERM	601/602	0.49		0.23										
45		well not installed																
45			10/19/87	ERM	601/602					0.11		3.4						
47			9/9/87	ERM	TCL											2.6J	63J	3.4J
47			9/9/87	EPA	TCL													
48			9/9/87	ERM	TCL	2.1J												
48			9/9/87	EPA	TCL	2.1												
49			9/9/87	ERM	601/602													
50			9/9/87	ERM	TCL											2.6J		
50			9/9/87	EPA	TCL													
51			9/9/87	ERM	TCL													
51			9/9/87	EPA	TCL													
52		OT	9/10/87	ERM	601/602	5.2J		0.53J						2.6(DUP)				
52		OT	9/10/87	EPA	TCL	6												
52		MID	11/16/87	ERM	601													
52		POST	11/16/87	ERM	601													
52		POST	1/19/88	ERM	601	past holding												
52		RAW	2/1/88	ERM	TCL	5.9												
52		POST	2/11/88	ERM	601													
53		KT	9/10/87	ERM	601/602	5.22												
54			9/9/87	ERM	601/602													
54			10/13/87	ERM	601/602													
55		SH	9/9/87	ERM	601/602													
56		KT	11/16/87	ERM	601													
57		OT	11/16/87	ERM	601													
58			4/11/88	EPA	PP										2.5J			
58		PT	11/16/87	ERM	601													

NOTES:

[1]
- 2 Spring location
- 1 Well location

[2]
- KT kitchen tap
- SH spring house
- PT pressure tank tap
- PCT, RAW tap before carbon filter
- MID tap between carbon filters
- POST sample tap after carbon filters
- OT outside tap
- WB boiled from well

[3]
- EPA Sampling/analysis by EPA contractor
- ERM Sampling and analysis by ERM and subcontracted laboratory

[4]
- TCL Target Compound List- in ERM analyses, VOA by 601/602 unless otherwise noted
- PP Priority Pollutant List
- VOC volatile organic compounds
- J result is a quantitative estimate
- B result is a suspect value
- 601 624 / 601/602 EPA analytical methods for VOA
- 608 EPA analytical method for pesticides

HISTORICAL RESIDENTIAL WATER QUALITY - ORGANICS

DATE ISSUED: 6/29/89

HOUSE # (1)	RESIDENCE	LOCATION (2)	DATE	SAMPLER (3)	SAMPLE LIST (4)	Concentrations in ppb (ppb) trichloro ethene	chloro methane	chloroform	bromodichloro methane	1,1 dichloro ethene	1,2 dichloro ethene	1,1,1 trichloro ethane	1,2 dichloro ethene	tetrachloro ethene	toluene	di-n-butyl phthalate	bis(2-ethylhexyl phthalate(BEP)	di-n-octyl phthalate
58	[redacted]	KT	11/16/87	ERM	601													
59		KT	11/16/87	ERM	601													
61		PT	11/19/87	ERM	601													
62		KT	12/7/87	ERM	601													
63		KT	12/7/87	ERM	601									0.81				
64		KT	12/7/87	ERM	601													
65		KT	12/7/87	ERM	601													
66		OT	12/7/87	ERM	601													
67		KT	12/7/87	ERM	601													
68		PT	12/7/87	ERM	601													
69		KT	1/4/88	ERM	601						0.74							
70			1/10/88	ERM	601													
71		PT	2/19/88	ERM	601													
72		PT	2/19/88	ERM	601			2.8										
73		OT	3/1/88	ERM	601						0.98							
74		OT	3/1/88	ERM	601						0.77	1.2						
75			10/7/88	ERM	601/602													
76		OT	3/8/89	ERM	601													
77			6/6/87	EPA	TCL													
78																		
79																		

NOTES:

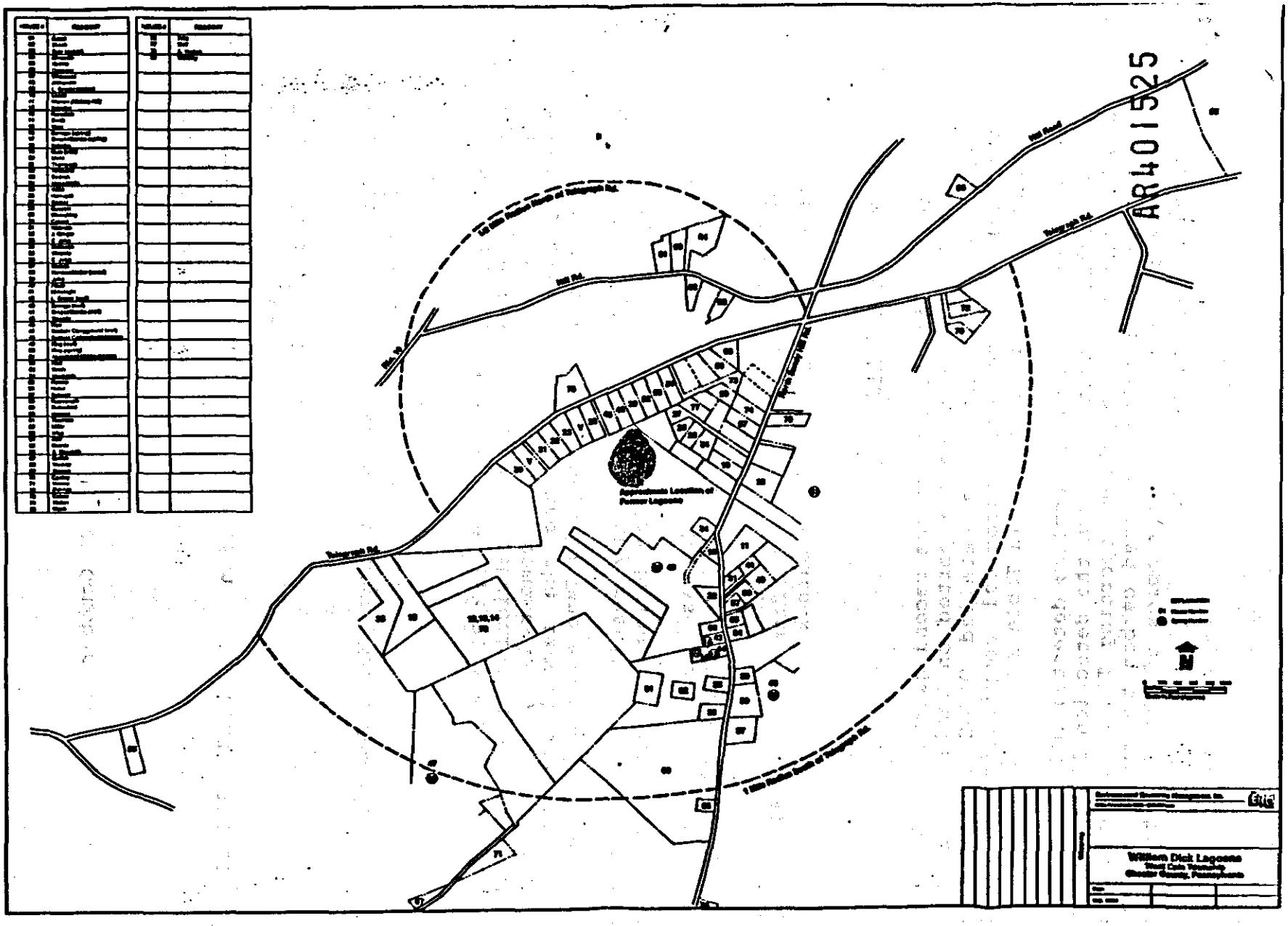
(1)
- S Spring location
- W Well location

(2) KT kitchen tap; BH spring house; PT pressure tank tap; PCT, RAW tap before carbon filter; MID tap between carbon filters; POST sample tap after carbon filters; OT outside tap; WB bailed from well

(3)
- EPA Sampling/analysis by EPA contractor
- ERM Sampling and analysis by ERM and subcontracted laboratory

(4) TCL Target Compound List- in ERM analyses, VOA by 601/602 unless otherwise noted
- PP Priority Pollutant List
- VOC volatile organic compounds

J result is a quantitative estimate
B result is a suspect value
601 624 / 601/602 EPA analytical methods for VOA
608 EPA analytical method for pesticides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William Dick Lagoons